Video Data Management System Archives and Provides Online Access to the NOAA Ocean Exploration Digital Video and Image Data on Deep Corals

Anna Fiolek and Eileen McVey

Janice Beattie, Director NOAA Central Library

U.S. Department of Commerce, NOAA, NESDIS, National Oceanographic Data Center, NOAA Central Library
1315 East-West Highway, Silver Spring, MD 20910; e-mail address: vdms@noaa.gov

ABSTRACT:

Since 2003, the National Oceanic and Atmospheric Administration's (NOAA) Office of Ocean Exploration (OE) has been collaborating with the NOAA Central Library (NCL), the National Oceanographic Data Center (NODC), the National Coastal Data Development Center (NCDDC), NOAA's Coral Reef Information System (CoRIS), and other NOAA offices to address the increasing demand for archiving, preserving, and providing online access to digital video and still images from the OE oceanographic expeditions.

The result of this collaboration is the development of the Video Data Management System (VDMS) which provides online information and access to NOAA oceanographic cruises and expeditions and complies with recognized applicable metadata standards and uses best practices.

Currently hundreds of digital video clips, highlight movies, still images and related documents and products from the NOAA signature expeditions to the coral reef areas are available via NOAALINC, the NOAA Central Library online catalog (http://www.lib.noaa.gov/uhtbin/webcat). NOAA scientists can also retrieve the expeditions' original tapes from the NOAA Library Archives. Additional online information includes related cruise reports, educational lesson plans, original video and image annotation documents, digital maps and Web sites.

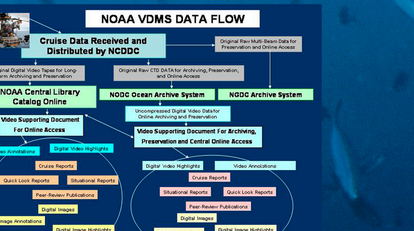


Figure 1. Schematic diagram of OE video and related data flow in VDMS system.

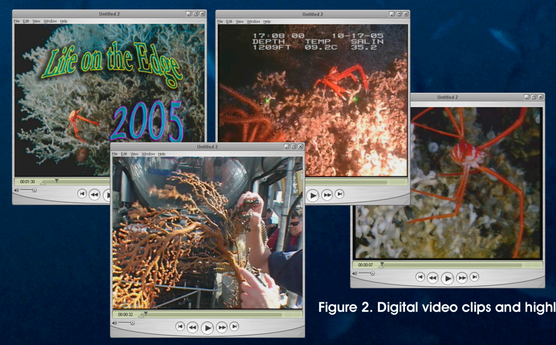


Figure 2. Digital video clips and highlights.

Figure 3. NOAA Office of Ocean Exploration home page: http://oceanexplorer.noaa.gov.

Figure 4. VDMS mascot - Charlie the Crab.

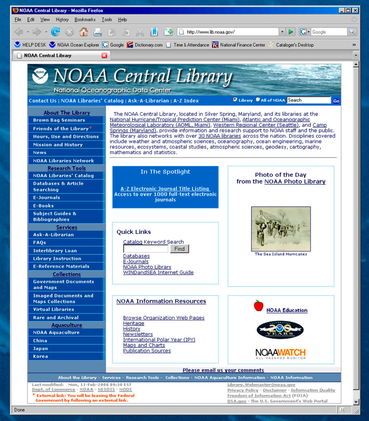


Figure 5. NOAA Central Library home page http://www.lib.noaa.gov.

VDMS Objectives:

- Provide timely online information about NOAA's Office of Exploration video data to the general public.
- Archive and preserve unique video and related data for future generations.
- Educate our Nation about NOAA oceanographic expeditions and underwater explorations through digital video and related data.
- Foster collaboration between NOAA librarians, data managers, and scientists from different NOAA offices and programs.
- Use or extend existing library tools, guidelines, and metadata standards to support new media formats: digital video, digital image, and digital text documents.
- Enhance data access and metadata sharing between NCL NOAALINC, NODC Ocean Archive System (OAS), and NCDDC MerMaid catalogs.

Figure 6. NOAA Photo Library: Coral Kingdom.

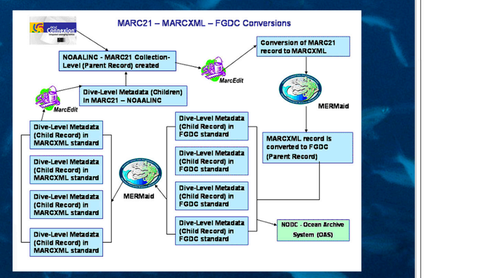
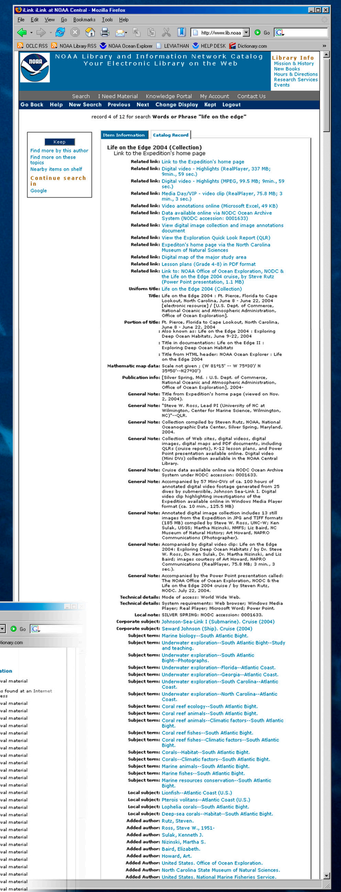


Figure 7. MARC21 to MARCXML to FGDC conversion workflow.



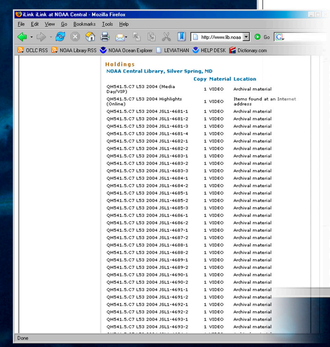


Figure 8. Library's collection-level metadata record in MARC21 standard provides online access to OE digital video highlights, video clips, video and image annotations, cruise reports, scientific datasets, lesson plans, digital maps and expedition Web sites.

Figure 9. OE cruise information in Digital Atlas.

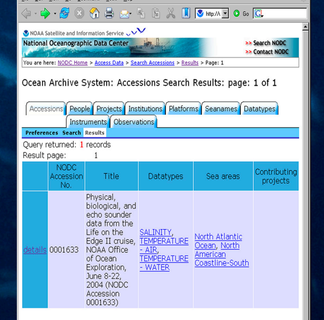


Figure 10. NODC Ocean Archive System (OAS) results page.

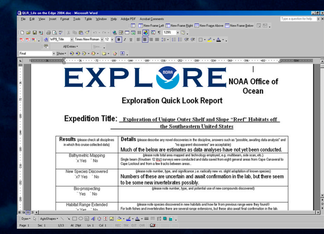


Figure 11. Cruise reports in Word or PDF formats.

LISD Current References 2008-01

NOAA Central Library, February 2008

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Project's e-mail: vdms@noaa.gov

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Poster authors: Anna Fiolek, NOAA Central Library, Silver Spring, MD, Anna.Fiolek@noaa.gov, Eileen McVey, NOAA Central Library, Silver Spring, MD, Eileen.McVey@noaa.gov
Poster's presenter: Linda Pikula, NOAA Miami Regional Library, Miami, FL, Linda.Pikula@noaa.gov

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Poster also available online at URL: http://docs.lib.noaa.gov/OEDV/CORIS_Videos/IYOR_2008_poster.pdf

Conference: 11th International Coral Reef Symposium, Fort Lauderdale, FL, July 7-11, 2008